Job No.: CTCE/BBMP/W.No.12/TRC/CEMENT/2012-13

Date: 04.02.2013

TEST REPORT

CLIENT	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
AGENCY	:	**Mr. T.R. Chandraiah,** Contractor, Bangalore.
NAME OF THE WORK	:	Construction of BS Slab drain & culverts at Medarahalli in Ward No. 12 in Shettyhalli Sub Division, BBMP, Bangalore.
REFERENCE	:	EE/DD/WO/01/2011-12 Dated: 05.04.2011
SAMPLE ID	:	CEMENT
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-1989
1	a) Initial Setting Time	IS-4031 (Part -5)	175 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	493 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part 3) by the Le-Chatelier method	1 mm	Not more than 10 mm
3	Standard Consistency	IS-4031 (Part -4)	29.00 %	-

AE W-12

Note:

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ಶಿವಾಜಿನಗರ ಉಪವಿಭಾಗ, ದಾಸಪ್ಪ ರಸ್ತೆ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara
Basaveshwaranagar,
Bangalore - 560 079

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Job No.: CTCE/BBMP/W.No.12/TRC/SAND/2012-13 : 04.02.2013

TEST REPORT ON FINE AGGREGATES (SAND)
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.

Agency : **Mr. T.R. Chandraiah,** Contractor, Bangalore.

Name of Work : Construction of BS Slab drain & culverts at Medarahalli in Ward No. 12 in Shettyhalli Sub Division, BBMP, Bangalore.

Reference : EE/DD/WO/01/2011-12 Dated: 05.04.2011

Date of Testing : 04.02.2013

Material : Sand Total Wt. of Aggregates in gms **2000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	56	2.80	2.80	97.2	90-100
2.36	274	13.70	16.50	83.5	75-100
1.18	382	19.10	35.60	64.4	55-90
600 Micron	486	24.30	59.90	40.1	35-59
300 Micron	467	23.35	83.25	16.8	8-30
150 Micron	243	12.15	95.40	4.6	0-10

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M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara
Basaveshwaranagar,
Bangalore - 560 079

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagara, Bangalore-79.
Tele fax : 23223227, Cell : 93428 39190, Website : www.civiltechconsultants.com
e-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Job No.: CTCE/BBMP/W.No.12/TRC/AGG/2012-13 : 04.02.2013

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.

Agency : **Mr. T.R. Chandraiah,** Contractor, Bangalore.

Name of Work : Construction of BS Slab drain & culverts at Medarahalli in Ward No. 12 in Shettyhalli Sub Division, BBMP, Bangalore.

Reference : EE/DD/WO/01/2011-12 Dated: 05.04.2011

Date of Testing : 04.02.2013

Material : 40mm Aggregates

Total Wt. of Aggregates in gms **25800**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	981	3.80	3.80	96.20	95-100
20	16787	65.07	68.87	31.13	30-70
10	5162	20.01	88.88	11.12	10-35
4.75	2545	9.86	98.74	1.26	0-5

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4th Block, Shakthi Ganapathi Nagara
Basaveshwaranagar,
Bangalore - 560 079

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Job No.: CTCE/BBMP/W.No.12/TRC/STEEL/2012-13

21.02.2013

TEST REPORT ON REINFORCEMENT STEEL

Client	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
Agency	:	**Mr. T.R. Chandraiah,** Contractor, Bangalore.
Name of the Work	:	Construction of BS Slab drain & culverts at Medarahalli in Ward No. 12 in Shettyhalli Sub Division, BBMP, Bangalore.
Reference	:	EE/DD/WO/01/2011-12 Dated: 05.04.2011
Date of Test	:	21.02.2013
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm^2	Tensile strength (Ultimate stress) N/mm^2	Elongation percent gauge length		
1	12	0.89	517	565	13.25	O.K	O.K
2	16	1.59	521	568	13.55	O.K	O.K

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M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar,
Bangalore - 560 079

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagara, Bangalore-79.
Tele fax : 23223227, Cell : 93428 39190, Website : www.civiltechconsultants.com
e-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

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Job No.: CTCE/BBMP/W.No.12/TRC/CUBE/2012-13

27.03.2013

TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
Agency	: **Mr. T.R. Chandraiah,** Contractor, Bangalore.
Name of the work	: Construction of BS Slab drain & culverts at Medarahalli in Ward No. 12 in Shettyhalli Sub Division, BBMP, Bangalore.
Reference	: EE/DD/WO/01/2011-12 Dated: 05.04.2011
Sample ID	: Culvert Deck Slab Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28^{th} day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	27.02.2013	27.03.2013	8.228	504.1	22.40
2	27.02.2013	27.03.2013	8.146	475.2	21.12
3	27.02.2013	27.03.2013	8.312	523.4	23.26

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M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthi Ganapathi Nagara
Basaveshwaranagar,

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagara, Bangalore-79.
Tele fax : 23223227, Cell : 93428 39190, Website : www.civiltechconsultants.com
e-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com